

April 1, 2018

Honorable Mayor, City Council,
Residents of the City of Carlsbad
1200 Carlsbad Village Drive
Carlsbad, CA 92008

**City Treasurer Letter of Transmittal
2016-2017 Annual Report of Investments**

I am pleased to present the Annual Report of Investments for the City of Carlsbad for the fiscal year ended June 30, 2017 (FY 16-17). The report is intended to provide reliable information as a basis for reviewing portfolio performance and making management decisions. It also provides an archival reference.

The City Treasurer is charged with the design of an effective cash management and investment program for the City of Carlsbad and all of its agencies. Among other activities this includes arranging for banking services; forecasting all cash receipts and expenditures; investing all inactive cash; managing investment risk exposures; and reporting all investment activities.

This report summarizes and analyzes the activities of the investment portfolio for the fiscal year. Total portfolio assets, investment portfolio relative to total city assets, source of portfolio assets, asset allocations, yield achieved, unrealized gains and losses, and cash revenues are presented. To provide perspective to this data a summary of observations are provided about global and domestic markets for the fiscal year ended June 30, 2017. Comparisons are also made with the preceding fiscal years. Finally, a statement is offered regarding the prospects for the fiscal year 2017-2018.

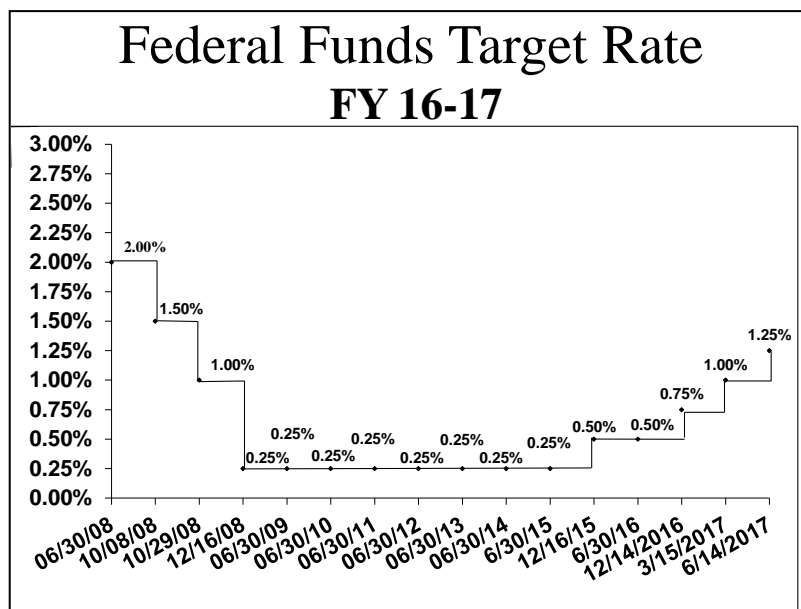
Sincerely,

Craig J. Lindholm
City Treasurer

CITY TREASURER

ANNUAL REPORT OF INVESTMENT PORTFOLIO FOR THE FISCAL YEAR ENDED JUNE 30, 2017

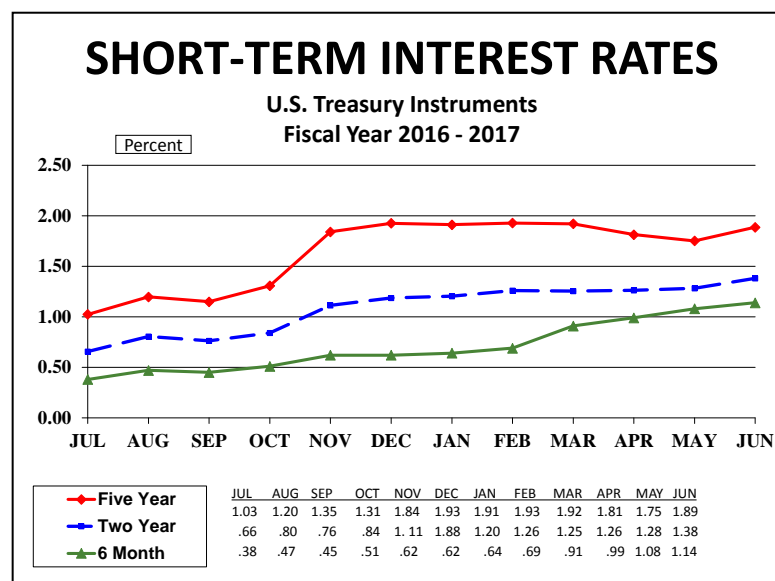
FY16-17 MARKET REVIEW



Federal funds rate is a key money market rate that correlates with rates of other short term credit arrangements. It is the interest rate that banks charge each other for overnight loans. In fiscal year 16-17, the Federal Reserve increased the federal funds rate three times from 0.50 percent to 1.25 percent.

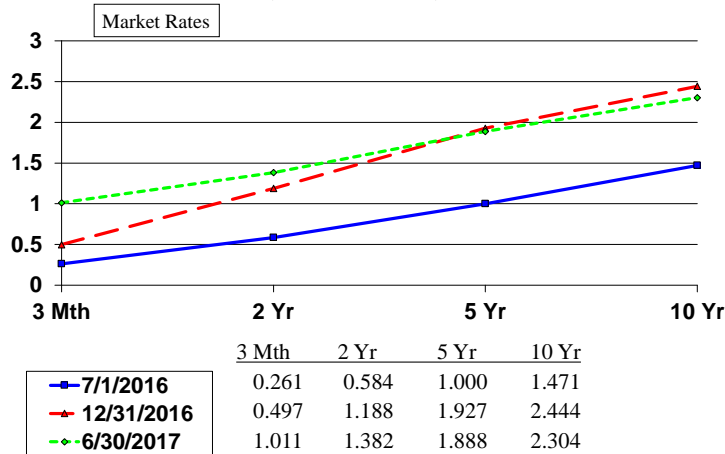
Changes in short-term market interest rates are usually affected by the actions of the Federal Reserve.

The five year and two year market rates increased from 1.00 percent and 0.58 percent in fiscal year 15-16 to 1.89 percent and 1.38 percent respectively in fiscal year 16-17. The six-month market rate increased from 0.35 percent in fiscal year 15-16 to 1.14 percent to end fiscal year 16-17.



YIELD CURVE

7/01/16, 12/30/16, 6/30/17



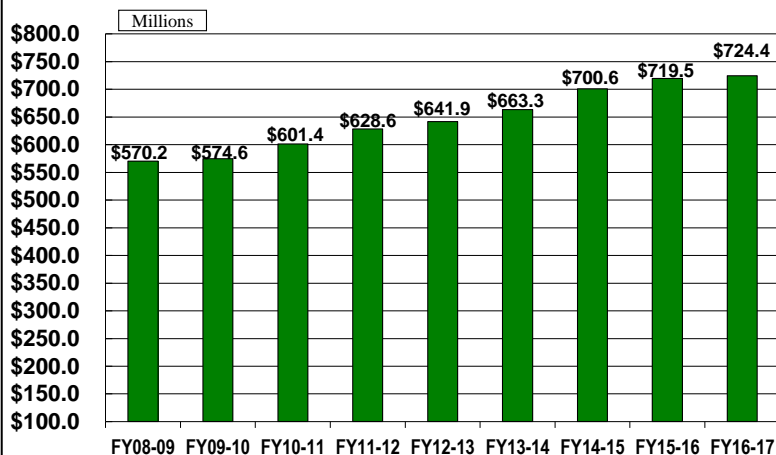
The yield curve is a graphic presentation of the difference between short-term and longer-term interest rates of U.S. Treasury instruments on a given day. Financial analysts use it to assess the market's expectation of recession or inflation. The normal shape of the yield curve has a moderately upward slope, with short-term rates lower than longer-term rates. If the upward slope steepens, the financial markets believe inflation may occur. An inverted yield curve is when short-term market rates are greater than longer-term

market rates. An inverted curve indicates that the financial markets expect a slower economy, if not a recession. At fiscal year end the yield curve showed a relatively moderate upward slope.

PORTFOLIO ANALYSIS

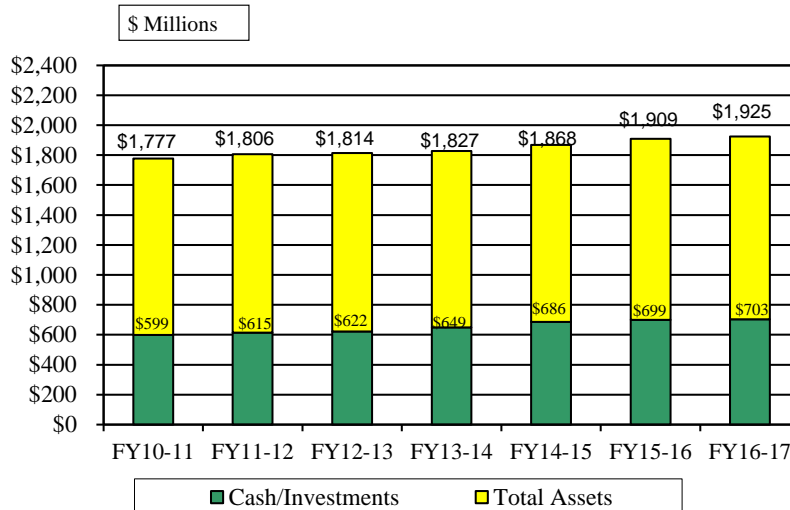
INVESTMENT PORTFOLIO

Dollar Amount of Assets (Fiscal Year End)



Total assets in the investment portfolio, based on cost, stood at \$724.4 million at the end of the fiscal year; a \$4.9 million increase. This increase includes interest earned, loan proceeds, and revenues in excess of expenses.

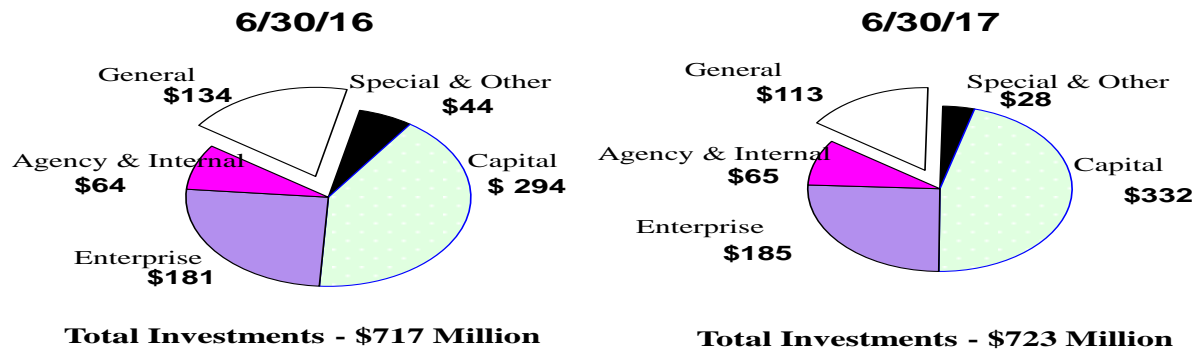
CASH & INVESTMENTS RELATIVE TO TOTAL ASSETS OF CITY AND ITS AGENCIES*



*Source: Comprehensive Annual Financial Report.

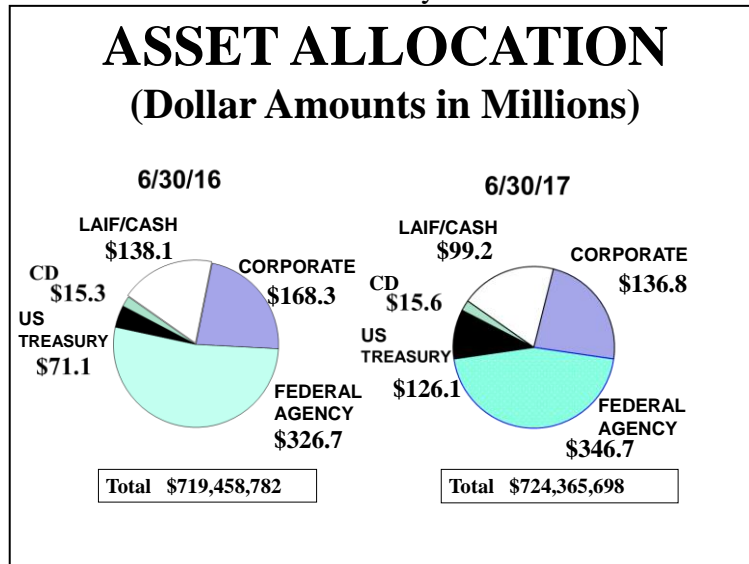
The city publishes a Comprehensive Annual Financial Report (CAFR) at the end of each fiscal year. Among other information, the CAFR presents a balance sheet showing the total assets owned by the city and all its agencies. At the end of FY 16-17, cash and investments managed by the City Treasurer represent 37 percent of all assets reported by the city and its agencies.

SOURCE OF POOL ASSETS (Dollar Amounts in Millions)



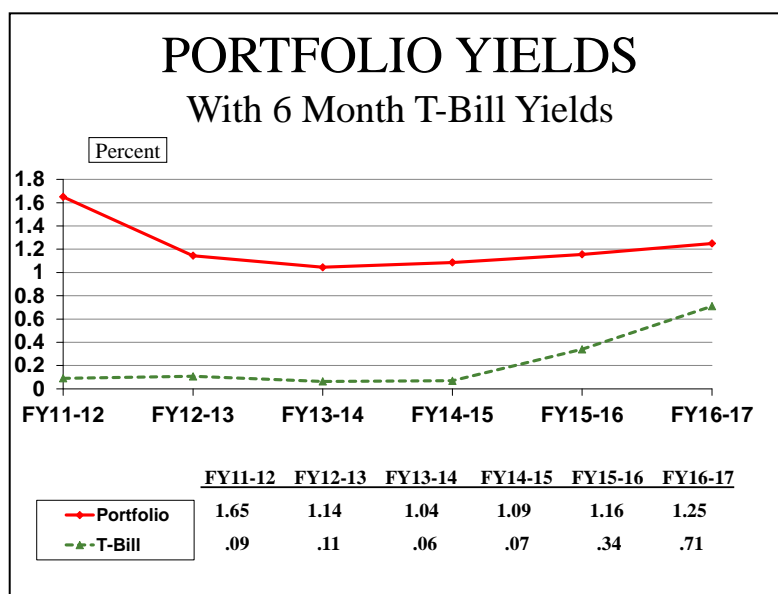
The portfolio is an internal investment pool that invests the available cash from various funds of all city agencies, including the city and the water district. The top three sources of portfolio assets calculated at amortized costs are: Capital Projects Fund at 46 percent; Enterprise Fund at 26 percent; and General Fund at 16 percent. Together, these three funds account for 88 percent of total portfolio assets.

Investments are made in financial instruments authorized by the city's Investment Policy and the California State Government Code. With the exception of bank deposits and deposits in the California State Local Agency Investment Fund (LAIF), all investments are in fixed-income instruments with known maturity dates.



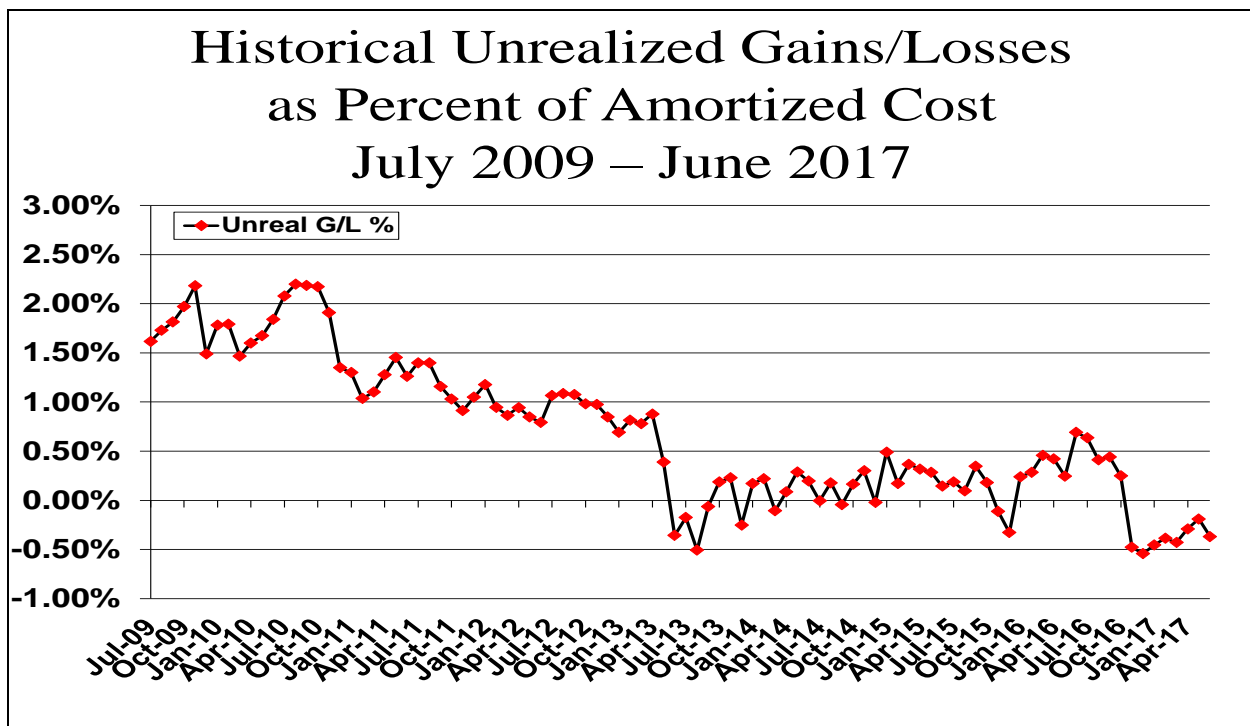
On June 30, 2017, 47.9 percent of portfolio assets were invested in federal agencies, 18.9 percent in corporate notes, 17.4 percent in US Treasuries, 2.1 percent certificates of deposit and 13.7 percent in LAIF and cash. During the past fiscal year, the dollar allocation of portfolio assets to treasuries, federal agencies and CD's increased while the allocation to LAIF/cash and corporates decreased from the previous year. Within the asset category of federal treasuries and agencies, investments in Treasuries, Federal Home Loan Bank, the Federal Home Loan

Mortgage Corporation, the Federal National Mortgage Association, the Federal Farm Credit Bank, Federal Agricultural Mortgage Corporation, Private Export Funding Corporation and Financing Corporation constituted 17, 11, 9, 12, 8, 3, 1 and 1 percent of the total portfolio, respectively. Federal agencies are creations of the U. S. Congress and include agencies and government-sponsored enterprises.



The average return of the portfolio increased to 1.25 percent from 1.16 percent the year before. The portfolio yield is heavily influenced by changes in short-term market interest rates since 23 percent of total investments were required to mature within one year. The average interest rate for six-month U.S. Treasury Bills increased to 0.71 percent from 0.34 percent the previous year.

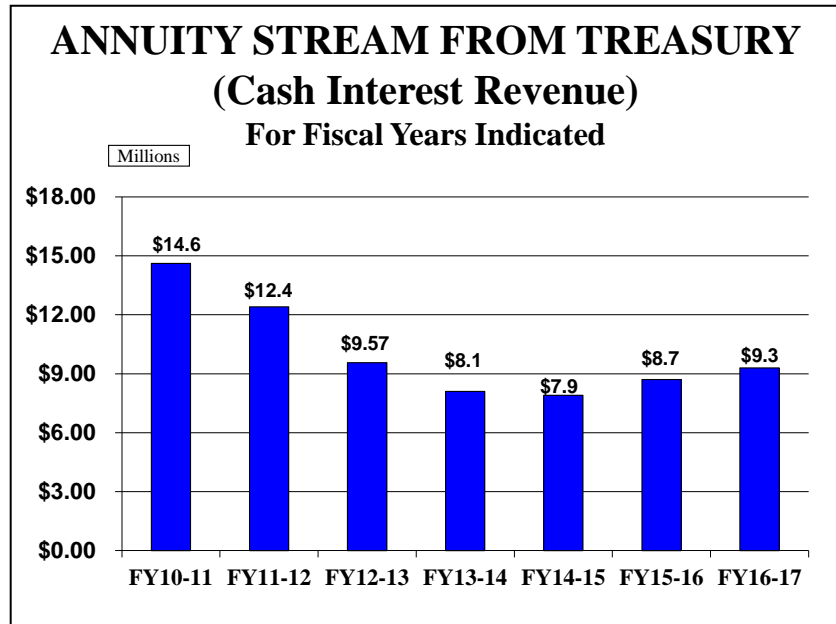
This graph shows the percent change in value of the portfolio over the last several years. Investments gain and lose market value subsequent to purchase because of changes in market interest rates. When market interest rates decrease, investments made previously at higher rates will gain value. The reverse is true when market interest rates increase. Accountants refer to these changes in value as unrealized gains and unrealized losses (commonly referred to as paper gains and paper losses). The gain/loss is not recognized until the investment is sold. Changes in value due to changes in market interest rates are normal and are to be expected.



With a buy and hold policy, an objective of the city's Investment Policy is to achieve an average market rate of return over the economic cycle. The success in achieving this objective can be approximated with having unrealized gains and losses that are relatively equal over time. Tracking and measuring unrealized gains and losses could also reveal any presence of high-risk investments in the portfolio. The changes in asset values shown in the graph indicate that portfolio investments are within the acceptable interest rate risk identified in the city's Investment Policy.

The total portfolio had a slight unrealized loss of 0.37 percent on June 30, 2017. If interest rates remain stable, unrealized gains and losses will remain near zero percent. However, this downward trend will continue if rates increase or when current investments with higher interest rates are called and reinvested at today's lower market rates.

Cash income from portfolio investments represents an annual stream of revenues from the Treasury. This annual stream totaled \$9.3 million, an increase of \$0.6 million from the previous fiscal year. Of the total cash interest revenues earned by the portfolio, approximately \$2.3 million was credited to the General Fund. Cash income is a function of assets in the portfolio, the market interest rates at the time of the investments, and the interest payment schedules of the portfolio holdings.



FY 16-17 REVIEW

National and international economic forces and events have a direct influence on the United States equity and fixed income markets.

Global Observations

Trading anxiety was evident in early 2016 when \$4T was lost in global equity markets in the months of January and February alone. Oil prices slumped to a multi-year low of \$27.10 per barrel. At this price level, US shale drillers began to back off their well development activity. Selling pressure in the energy sector escalated. About the same time, Japan started to support a negative interest rate policy. As investors looked for higher yields, this policy had the effect of further reducing interest rates elsewhere in the US, the Eurozone and the United Kingdom.

In June, the Brexit vote occurred within the UK. This referendum passed, starting a two-year clock requiring the UK to leave the European Union. This vote caught many leading political observers by surprise. It, however, reflected the majority will of the UK citizens about its relationship to the EU and the role it has in their day to day lives.

By August of 2016 the universe of negative yielding debt was approximately \$13.4T globally. The historically low interest rates created pressure on pension fund managers and insurance company executives as they looked to match long term obligations to fixed income obligations.

A major market moving event occurred with the election of Donald Trump as US President. In short order, the focus turned to the potential benefits of fiscal stimulus, a reduction in business regulations and the possibility of tax cut legislation. These events pushed equity valuations higher month by month in 2017 to record high levels eventually referred to as the “Trump Bump”.

From the November election date of President Trump to late January of 2018 the S&P 500 index rose 34%. In the same month of November 2016, OPEC met in Vienna to discuss commitments to production cuts to their output of oil. They reached agreement on member states target production levels trying to stabilize oil prices at the \$50 per barrel level. Several non-OPEC producers also agreed to reduce their output in December and global oil prices strengthened considerably.

US Bonds

During the past year returns on bonds increased significantly, especially in the short -term maturities. The strengthening US economy coupled with rate increases by the Federal Reserve have proved to be a good catalyst for growth. Adding to this environment was growth in the US economy of 2.3%, the fastest year over year growth in over 2 years.

Levels of unemployment also hit new lows reaching their lowest levels observed in over 16 years. This has had a positive effect on improving consumer confidence which should lead to higher retail sales, a significant component of overall US GDP. Eventually, as personal incomes rise, we can anticipate further growth in economic results. Since December of 2015 interest rates have increased 1.50%. The Federal Reserve is monitoring employment levels and inflation as it considers additional rate changes over the coming months.

FY 17-18 PREVIEW

The environment going forward continues to be challenging as economies around the world look for ways to stimulate growth. The backdrop of terrorist activities places constraints on economic growth. We anticipate a continued cautious approach to increasing US interest rates as the Fed monitors data points for any sign of weakness that may warrant a pause.

At the end of FY 16-17, LAIF investments had a yield of 0.93 percent, and all other investments had a yield of 1.47 percent. Revenues on investments are projected to remain flat or increase slightly due to the continuing low interest rate environment.

On June 30, 2017 the yield of the total portfolio averaged 1.25 percent. Total assets in the investment portfolio stood at \$724.4 million as measured on a cost basis at the close of FY 16-17.

APPENDICES TO ANNUAL REPORT OF INVESTMENT PORTFOLIO

APPENDIX A: RISK MANAGEMENT AND DISCLOSURE

All investments are exposed to risk of some type. The objective of risk management is to identify the risks involved and establish acceptable levels of risks that are consistent with the city's investment objectives. Risk management includes managing, measuring, monitoring, and reporting the various risks to which portfolio investments are exposed.

Portfolio investments are exposed to the following types of risks:

- A. Credit risk
 - a. Custodial credit risk
 - a) Investments
 - b) Deposits
 - b. Default credit risk
 - c. Concentration credit risk
- B. Interest rate risk
- C. Event Risk

As of June 30, 2017, the portfolio had the following investments and cash in its internal investment pool.

<u>Investment</u>	<u>Maturities</u>	<u>Market Value</u>	<u>Market Value Gain (Loss)*</u>
U. S. agencies	July 2017 – May 2022	\$470,523,000	\$ (1,831,000)
Corporate Notes	Sept 2017 – May 2022	134,977,000	(504,000)
Certif. of Deposit	Nov 2017 – June 2022	15,613,000	38,000
LAIF		94,406,000	(100,000)
Sweep accounts		4,028,000	--
Cash accounts		<u>633,000</u>	<u>--</u>
Total		\$720,018,000	\$ (2,397,000)

*Market Value less Amortized cost.

Disclosures

Custodial Credit Risk (Investments). The city uses a third party custody and safekeeping service for its investment securities. The Mitsubishi UFJ Financial Group Union Bank, N.A. (MUFGUB) is under contract to provide these custodial services. Custodial credit risk is the risk that the city will not be able to recover the value of its investments in the event of a UBC failure. All city investments held in custody and safekeeping by MUFGUB are held in the name of the city and are segregated from securities owned by the bank. This is the lowest level of custodial credit risk exposure.

Custodial Credit Risk (Deposits). The city maintains cash accounts at Wells Fargo Bank (WFB) and MUFGUB. At the conclusion of each business day, balances in these accounts are “swept” into overnight investments. These overnight investments are pooled and collateralized with either U.S. government securities or U.S. agency securities. The California Code authorizes this type of investment. A small amount of cash is not swept from the WFB checking accounts to cover checks that may be presented for payment. Amounts up to \$250,000 are FDIC insured.

Default Credit Risk. Default credit risk is the risk that the issuer of the security does not pay either the interest or the principal when due. The debts of most U.S. agencies are not backed by the full faith and credit of the federal government; however, because the agencies are U.S. Government-sponsored, they carry AA credit ratings. The default credit risk of these investments is minimal.

Unless otherwise exempted, California state code limits investments to the top three credit ratings (AAA, AA, and A). It is the city’s policy, however, to limit investments to the top two credit ratings (AAA and AA). As of June 30, 2017, two investments in corporate notes had a credit rating below the AA limit. These investments were made when the credit ratings were either AAA or AA. California state code and the city’s Investment Policy allow the City Treasurer to determine the course of action to correct exceptions to the policy. It is the intent of the City Treasurer to hold these investments in the portfolio until maturity unless events indicate a sale should be made. The default credit risk for corporate notes with a credit rating of single A is higher than U.S. Treasuries, federal agencies or LAIF, but is considered by the City Treasurer to be within acceptable limits for purposes of holding to maturity.

The Local Agency Investment Fund (LAIF) is an investment pool managed by the California State Treasurer. Its investments are short-term and follow the investment requirements of the state. As of June 30, 2017, the average maturity of the LAIF investments was 194 days. The State Treasurer is not required to contract for a credit rating to be assessed for LAIF. California State Code Section 16429.3 excludes LAIF deposits from being transferred, loaned, impounded or seized by any state agency or official.

Concentration Credit Risk. Concentration credit risk is the heightened risk of potential loss when investments are concentrated in one issuer. The California state code does not identify a specific percentage that indicates when concentration risk is present for any one issuer. The state code does, however, require that total investments in medium-term corporate notes of all issuers not exceed 30 percent of the portfolio. As of June 30, 2017, approximately 18.9 percent of the city's total portfolio investments were in medium-term corporate notes.

For concentration of investments in any one issuer, the city's Investment Policy requires that no more than 5 percent of investments in corporate notes be in any one issuer. There is no similar requirement in either the state code or the city's Investment Policy for U.S. agencies. As of June 30, 2017, no investments in any one corporate issuer exceeded 5 percent of total portfolio investments.

Interest Rate Risk. Interest rate risk is the risk that investments will lose market value because of increases in market interest rates. A rise in market interest rates will cause the market value of investments made earlier at lower interest rates to lose value. The reverse will cause a gain in market value. As of June 30, 2017, the portfolio had a 0.66 percent loss in market value based on cost.

The city's Investment Policy has adopted two means of limiting its exposure to market value losses caused by rising market interest rates: (1) Limiting total portfolio investments to a maximum modified duration of 2.2, and (2) requiring maturing investments within one year be equal to an amount that is not less than 2/3 of the current operating budget \$250,146,000. As of June 30, 2017, the modified duration of the portfolio was 1.942, within the required maximum of 2.2. Investments maturing within one year were \$229,659,000, exceeding the required minimum of \$166,762,000. The city's exposure to interest rate risk is within acceptable limits.

Event Risk. Event risks include the chance that something unexpected will impede the ability of an issuer of a security to meet its obligations. These types of risks are usually short in duration, but can impair the city's ability to communicate with or use banking services. Such an event could cause a delay in collecting securities which have matured. Security risks are also within this category.

APPENDIX B: PORTFOLIO ACTIVITIES FOR FISCAL YEAR ENDED JUNE 30, 2017

The city's portfolio balance increased 0.68 percent from \$719.5 million to \$724.4 million based on cost in fiscal year 2016-17. The increase of \$4.9 million does little to show the volume of cash that flows in and out of the portfolio in the course of one fiscal year. The following table illustrates that the City Treasurer managed over three billion dollars of cash inflows and cash outflows which prompted investment decisions during fiscal year 2016-17.

Cash Flows:

Bond Maturities	\$ 115,828,000
Bond Calls	75,225,000
LAIF Withdrawals	239,982,000
Sweep Withdrawals	1,046,024,000
Interest Income	9,286,000
Bond Purchases	242,996,000
LAIF Investments	236,272,000
Sweep Investments	<u>1,051,349,000</u>
Total	<u>\$3,016,962,000</u>